



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Michelle M. HANNA

Appl. No.: 10/600,581

Filed: June 23, 2003

For: **Molecular Detection Systems
Utilizing Reiterative
Oligonucleotide Synthesis**

Confirmation No.: 8564

Art Unit: 1637

Examiner: Kim, Young J.

Atty. Docket: 2072.0010002/MAC/DJN

**Fourth Supplemental Information Disclosure Statement
Under 37 C.F.R. §1.97(c)**

Mail Stop Amendment

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Listed on accompanying IDS Forms, PTO/SB/08A and PTO/SB/08B, are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Copies of documents **FP1** and **NPL1** to **NPL7** are submitted. However, in accordance with 37 C.F.R. § 1.98(a)(2), copies of U.S. patents and patent application publications, **US1** to **US12**, cited on the attached IDS Form, PTO/SB/08A, are not submitted.

The Examiner's attention is directed to the following co-pending U.S. Patent Applications, which are directed to related technical subject matter:

Application No. 10/425,037, inventor Hanna, filed April 29, 2003; published on

March 18, 2004 as 2004/0054162 A1; listed as Document US 2004/0054162 A1

12/14/2006 HMARZ11 00000148 11234292
01 FC:1806
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01 FC:1806
180.00 OP

Void date: 12/14/2006 HMARZ11
12/14/2006 HMARZ11 00000148 11234292
01 FC:1806 -180.00 OP

Application No. 10/790,766, inventor Hanna, filed March 3, 2004; published on August 12, 2004 as 2004/0157257 A1; listed as Document **US6**;

Application No. 10/686,713, inventor Hanna, filed October 17, 2003; published on September 9, 2004 as 2004/0175724 A1; listed as Document **US7**;

Application No. 10/602,045, inventor Hanna, filed June 24, 2003; published on November 25, 2004 as 2004/0234996 A1; listed as Document **US8**;

Application No. 10/607,136, inventor Hanna, filed June 27, 2003, published on February 3, 2005 as 2005/0026150 A1; listed as Document **US9**;

Application No. 10/488,971, inventor Hanna, § 371 date: October 18, 2004; published on March 24, 2005 as 2005/0064414 A1; listed as Document **US10**;

Application No. 10/976,240, inventor Hanna, filed October 29, 2004; published on September 29, 2005 as 2005/0214796 A1; listed as Document **US11**; and

Application No. 10/551,775, inventor Hanna, § 371 date: October 3, 2005; published on September 14, 2006 as 2006/0204964 A1; listed as Document **US12**.

The identification of these U.S. Patent Applications is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during examination.



Equivalent of Form PTO/SB/08A (07-06)

Approved for use through 09/30/2006. OMB 0651-0031

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Substitute for form 1449A/PTO				Complete if Known	
FOURTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	10/600,581
				Filing Date	June 23, 2003
				First Named Inventor	Michelle M. HANNA
				Art Unit	1637
				Examiner Name	Kim, Young J.
Sheet	1	of	1	Attorney Docket Number	2072.0010002/MAC/DJN

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	US1	5,194,370	03/16/1993	Berninger <i>et al.</i>	
	US2	5,597,694	01/28/1997	Munroe <i>et al.</i>	
	US3	5,846,723	12/08/1998	Kim <i>et al.</i>	
	US4	7,045,319	05/16/2006	Hanna	
	US5	2004/0054162 A1	03/18/2004	Hanna	
	US6	2004/0157257 A1	08/12/2004	Hanna	
	US7	2004/0175724 A1	09/09/2004	Hanna	
	US8	2004/0234996 A1	11/25/2004	Hanna	
	US9	2005/0026150 A1	02/03/2005	Hanna	
	US10	2005/0064414 A1	03/24/2005	Hanna	
	US11	2005/0214796 A1	09/29/2005	Hanna	
	US12	2006/0204964 A1	09/14/2006	Hanna	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	FP1	EP 0 369 775 A2	05/23/1990	Lifecodes Corporation		

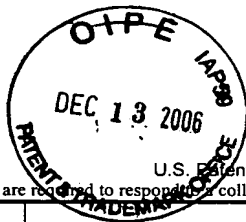
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Examiner Signature		Date Considered	
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449B/PTO				Complete if Known	
FOURTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	10/600,581
				Filing Date	June 23, 2003
				First Named Inventor	Michelle M. HANNA
				Art Unit	1637
				Examiner Name	Kim, Young J.
Sheet	1	of	1	Attorney Docket Number	2072.0010002/MAC/DJN

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	NPL1	AIYAR, S.E., <i>et al.</i> , "A Mismatch Bubble in Double-stranded DNA Suffices to Direct Precise Transcription Initiation by <i>Escherichia coli</i> RNA Polymerase," <i>J. Biol. Chem.</i> 269:13179-13184, American Society for Biochemistry and Molecular Biology, Inc. (1994)	
	NPL2	DAUBE, S.S., <i>et al.</i> , "Coupling of RNA displacement and intrinsic termination in transcription from synthetic RNA DNA bubble duplex constructs," <i>Proc. Natl. Acad. Sci. USA</i> 91:9539-9543, National Academy of Sciences (1994)	
	NPL3	GOHARA, D.W., <i>et al.</i> , "Poliovirus RNA-dependent RNA Polymerase (3D ^{pol})," <i>J. Biol. Chem.</i> 275:25523-25532, The American Society for Biochemistry and Molecular Biology, Inc. (August 2000)	
	NPL4	GRIEP, M.A., and McHENRY, C.S., "Fluorescence Energy Transfer between the Primer and the β Subunit of the DNA Polymerase III Holoenzyme," <i>J. Biol. Chem.</i> 267:3052-3059, The American Society for Biochemistry and Molecular Biology, Inc. (1992)	
	NPL5	HANNA, M.M., and MEARES, C.F., "Topography of transcription: Path of the leading end of nascent RNA through the <i>Escherichia coli</i> transcription complex," <i>Proc. Natl. Acad. Sci. USA</i> 80:4238-4242, National Academy of Sciences (1983)	
	NPL6	KINSELLA, L., <i>et al.</i> , "RNA Polymerase: Correlation Between Transcript Length, Abortive Product Synthesis, and Formation of a Stable Ternary Complex," <i>Biochemistry</i> 21:2719-2723, American Chemical Society (1982)	
	NPL7	PICKETTS, D.J., <i>et al.</i> , "Differential termination of primer extension: a novel, quantifiable method for detection of point mutations," <i>Human Genetics</i> 89:155-157, Springer Verlag (1992)	

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Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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